



BEND-TECH, LLC.

Quality software & machines developed and manufactured in USA

X-Motor Set Screw Adjustment Guide

The X-motor gear box used to drive your chuck trolley along the rail may be compromised in the case that the internal set screw inside the gear box is ever removed/backed out from its original seating. In this case you would experience oblong holes on an inconsistent basis along with parts possibly being cut too short or too long.

Refer to this guide if this is the case.

Make sure your Dragon machine is turned OFF at this time.

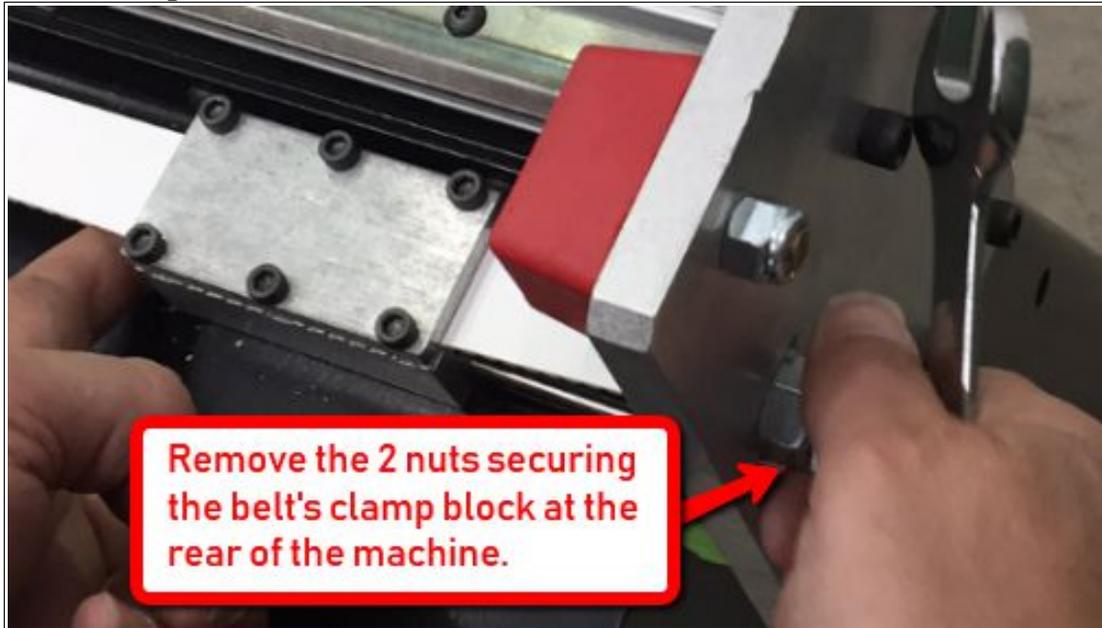
- 1. Before starting through this guide, we highly advise you to have a belt tension gauge* as you will be removing the belt and re-installing it during this instructional guide.**
- 2. Without a belt tension gauge, we suggest writing down the distance from the rear of the clamp block to the rear plate before loosening it from your machine. See picture right.**

Before continuing ensure that the rails of your Dragon machine are lined up straight along the entire machine's length.



*Belt Tension Gauge: <https://www.mcmaster.com/#5913t1/=1bcp43a>

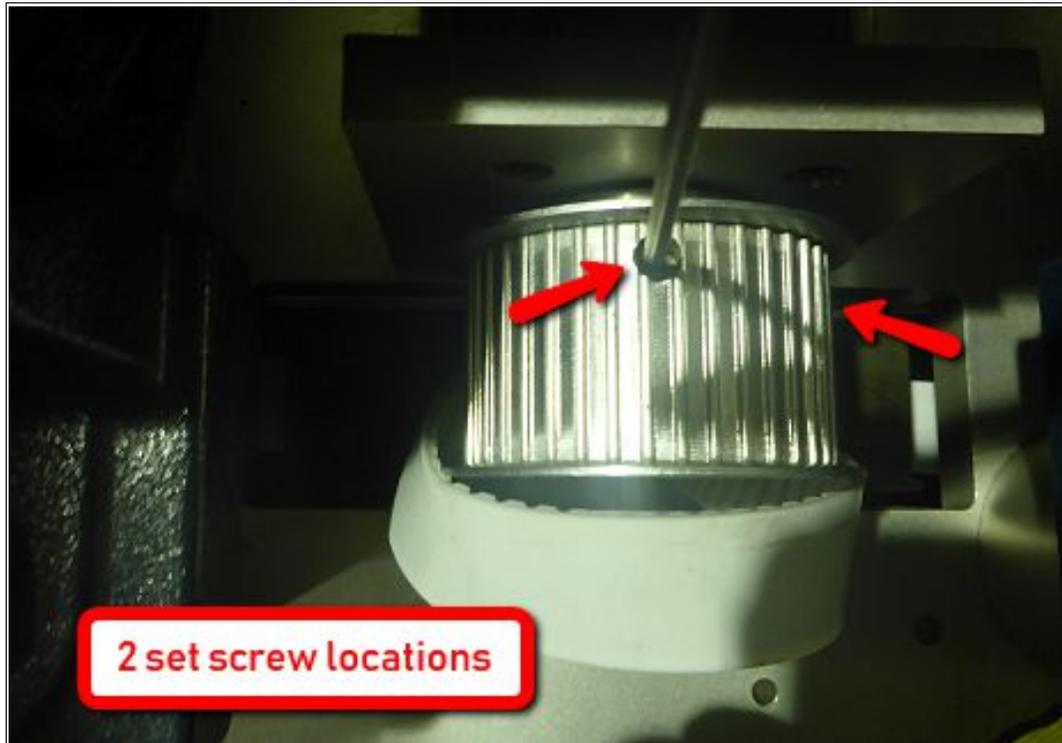
3. Afterward, using a 3/4" wrench, remove the 2 nuts securing the clamp block to the rear plate of the machine. Set aside.



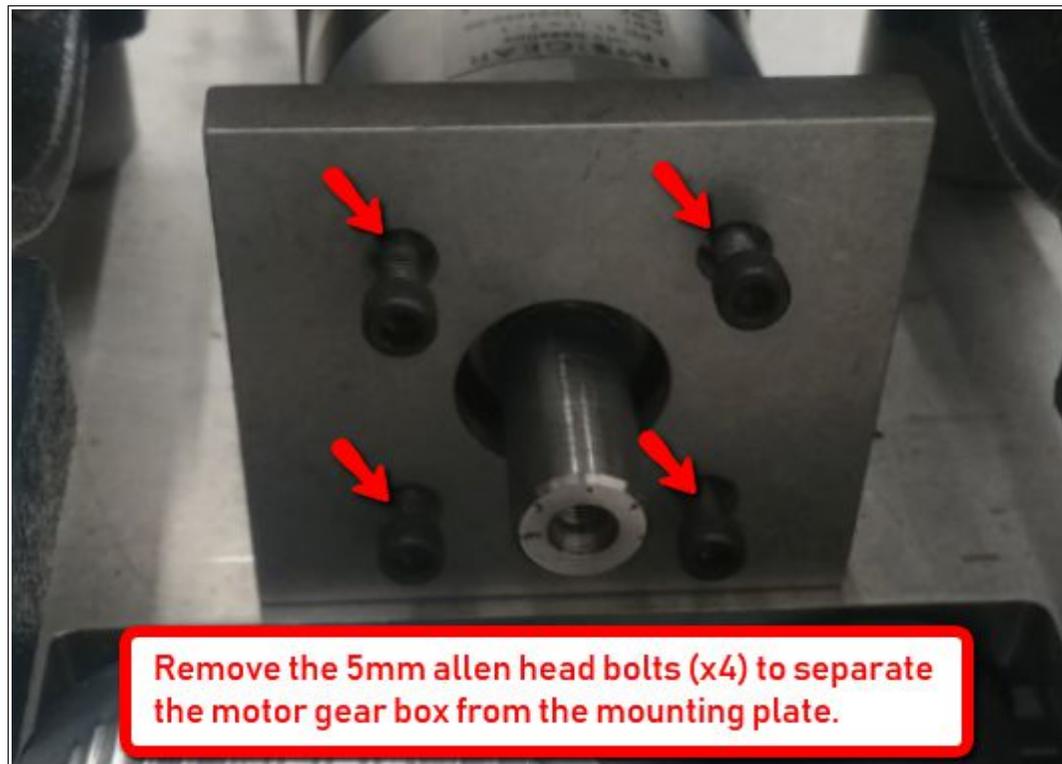
4. With the clamp block free from the rear plate, remove the chuck housing from the chuck trolley by first removing the 1/8" bolts from the bottom side (x16) all the way around the housing, then removing either the front or rear panel (x10). Disconnect the DC plug inside leading to the E-stop button, then carefully lift the housing off the trolley.



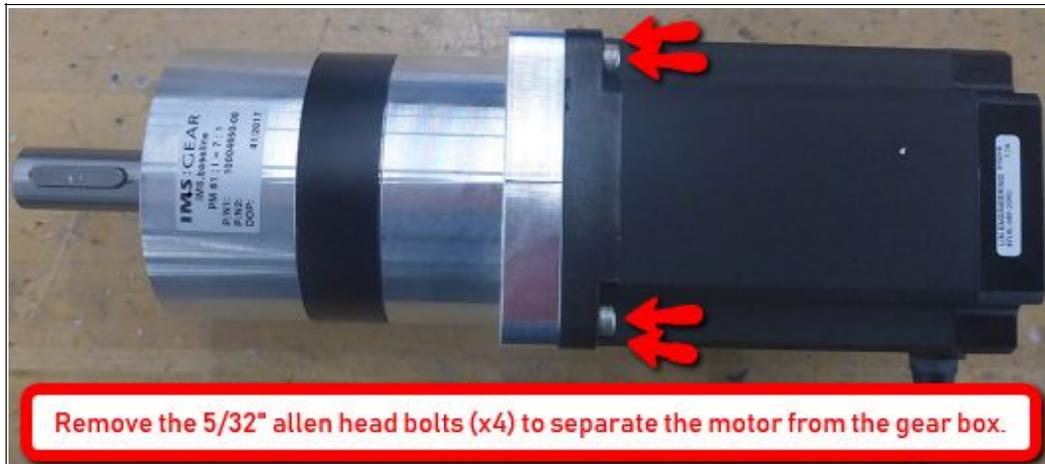
5. Revealing the X-axis pulley and motor, slip the belt off of the top aluminum pulley and use a 1/8" allen head wrench to remove the 2 set screws mounting the pulley to the motor shaft. Then, remove the pulley and set aside.



6. With the pulley off, use a 5mm allen head wrench to remove the 4 bolts securing the motor gear box to the motor mounting plate.



7. With the motor and gear box removed from the mounting plate, remove the 4 allen head bolts from the front of the motor and separate the two components.



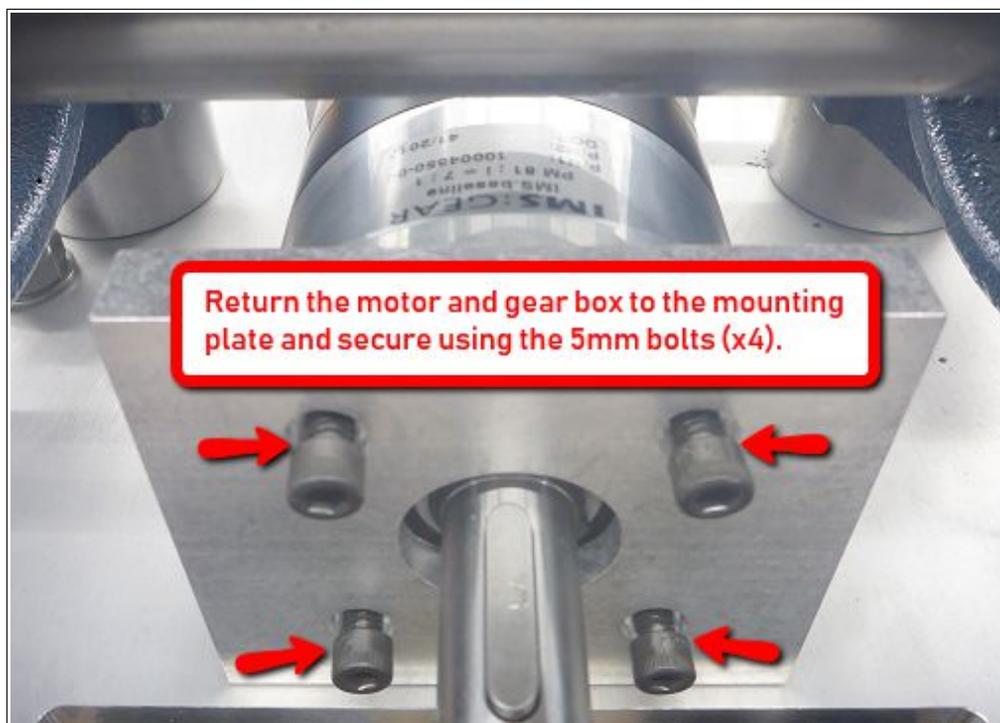
8. Attached to the shaft of the motor is a gear box driver component. This component must be spaced to .426" away from the surface of the motor using a micrometer. The set screw must then be loctited (using blue or red loctite) and tightened back down. Refer to the corresponding pictures for help.



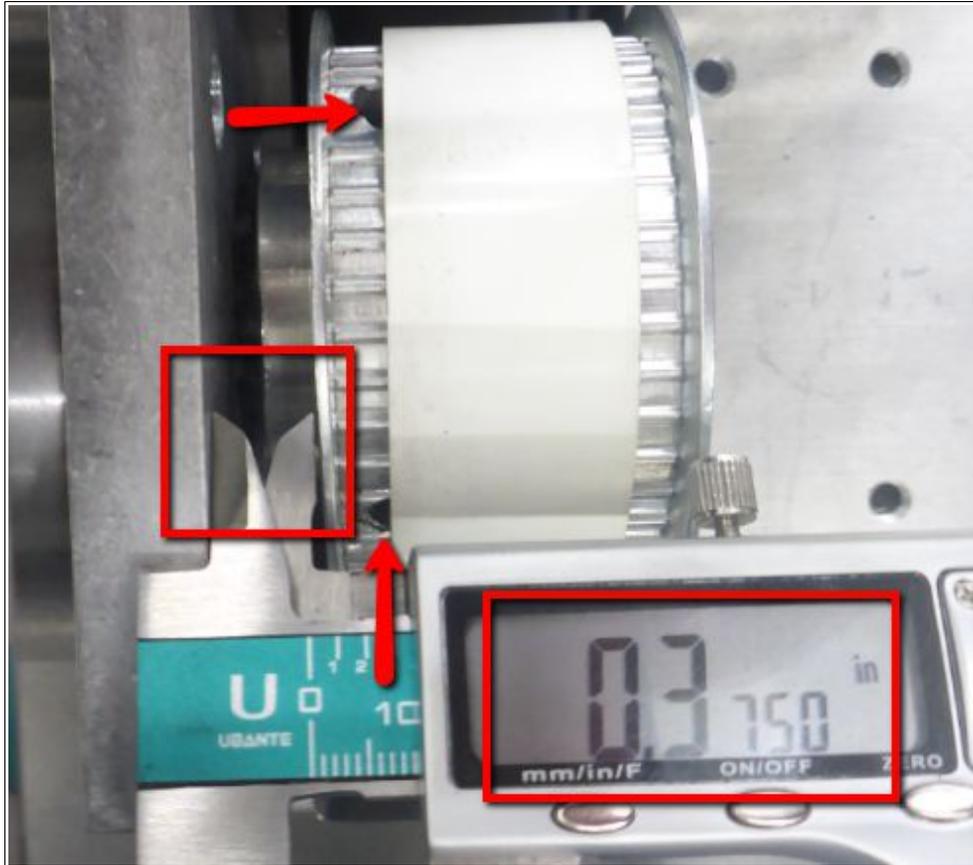
9. Now, line up the stickers on the motor and gear box and secure them together using the 5/32" allen head bolts (x4).



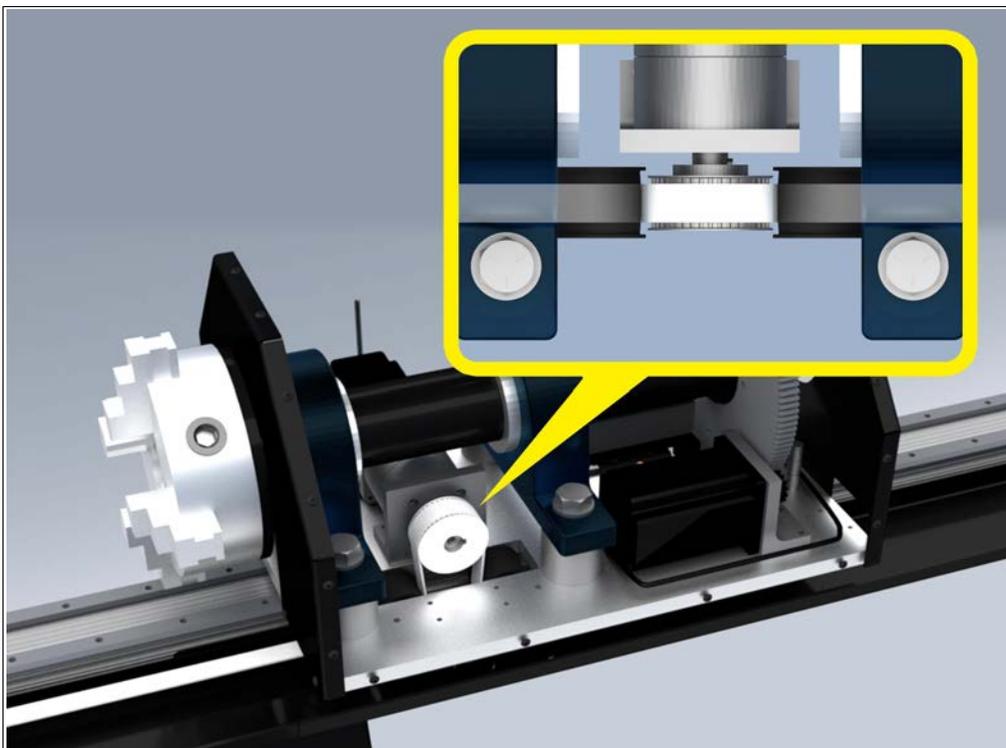
10. With the stickers facing UPWARD, return the assembly to the motor mounting plate on the chuck trolley. Affix with the 5mm bolts (x4).



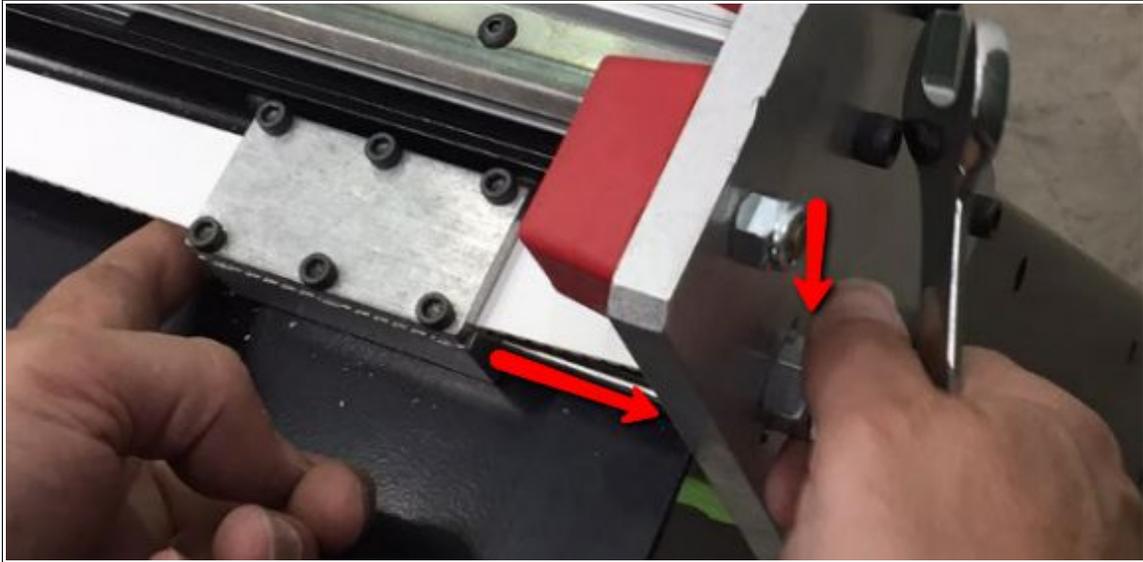
The pulley should rotate along with the motor shaft and show NO signs of play.



12. Make sure that the belt wraps up and around the pulley and that it **DOES NOT** ride up on the inner edges of the black idler pulleys beneath it. This is **CRUCIAL** to maintain the integrity of your belt. See picture below.



13. With the belt routed as it should be, tighten down the rear clamp block to its original distance from the rear plate.



14. Re-attach the chuck housing* to the chuck trolley with the 26 allen head screws removed earlier.



***Make sure that your emergency stop button's DC plug is re-attached inside.**

With all of these steps completed in full, you are free to continue producing parts on the Dragon machine as before.

Thank you for reading this helpful guide.

**If you have questions or concerns please contact a Bend-Tech representative using
the information provided below.**



Bend-Tech Dragon Support Team
Bend-Tech LLC.
1-651-257-8715
support@bendtechdragon.com
support@bend-tech.com
<http://www.bendtechdragon.com>

The information transmitted is intended solely for the individual or entity to which it is addressed and may contain confidential and/or privileged material. Any review, retransmission, dissemination or other use of or taking action in reliance upon this information by persons or entities other than the intended recipient is prohibited. If you have received this email in error please contact the sender by reply e-mail and destroy all copies of the original message.
